#### References:

Allen, J. A. 1891. On a collection of birds from Chapada, Matto Grosso, Brazil, made by Mr. Herbert H. Smith. Bull. Amer. Mus. Nat. Hist., 3: 337-380.

Carriker, M. A., Jr. 1955. Notes on the occurrence and distribution of certain species of Colombian birds. *Novedades Colombianas*, 1: 48–64.

Meyer de Schauensee, R. 1948. The birds of the Republic of Colombia. Part I. *Caldasia*,

Ridgway, R. 1912. Color standards and color nomenclature. Privately printed, Washington. Zimmer, J. T. 1929. A study of the Tooth-billed Red Tanager, Piranga flava. Field Mus. Nat.

Hist. Zool. Ser., 17: 169-219.

## Two new subspecies of the Red-crowned Ant Tanager Habia rubica from Venezuela, with remarks on Colombian populations

by Kenneth C. Parkes Received 15th February, 1969

Within the highly polytypic species Habia rubica (Vieillot), the current literature ascribes the subspecies H. r. rubra to Trinidad and the mountains of adjacent Venezuela in the states of Sucre and Monagas. The species has never been reported from Venezuela south of the Orinoco, Carnegie Museum possesses a series of eight specimens of the Red-crowned Ant Tanager taken by the late M. A. Carriker, Jr., at the Río Yuruán, eastern Bolívar, Venezuela. This represents a distinct range extension for the species, which is unknown in the Guianas or in Brazil north of the Amazon. The long-overlooked specimens of the Blue-backed Tanager (Cyanicterus cyanicterus), a species typical of the Guianas, from this same Río Yuruán locality (Parkes, in press) suggest that Habia rubica may well extend at least to Guyana.

Comparison of this series with other material in Carnegie Museum reveals, as might be expected, that the birds from Bolívar represent an undescribed subspecies. Furthermore, the ascription of the birds of north-eastern Venezuela to rubra of Trinidad is incorrect. There are thus two overlooked subspecies of Habia rubica in Venezuela. That of the north-eastern mountains

may be called:

### Habia rubica crissalis, subsp. nov.

Type: Carnegie Museum no. 106889, adult female, collected at Mirasol (3,000 feet), about 15 km. S. of Cumanacoa, Sucre, Venezuela, 23rd December, 1929, by H. J. Clement (collector's no. 379).

Characters: Females nearest H. r. rubra of Trinidad, but underparts richer and warmer in colour, especially noticeable on the crissum, which is bright orange-brown rather than dull orange-buff. Abdomen buff rather than whitish as in rubra, but paler than in the richly coloured females of coccinea, the race found in the Mérida region of western Venezuela. In coccinea the underparts are almost uniform rather than distinctly paler on the abdomen than on the breast as in rubra and crissalis. Adult males have the throat deeper red than rubra, resembling coccinea in this respect, but have the posterior underparts paler and pinker than coccinea, brighter and more scarlet than rubra. The abdomen colour is thus intermediate between coccinea and rubra, but the bright coccinea-like throat contrasts more sharply with the posterior underparts than in either of the other two races. Dorsally, males match coccinea quite closely. This race thus to some extent represents an intermediate between coccinea and rubra, with males rather more like coccinea and females rather more like rubra, but well characterized in both sexes. In view of the geographic isolation of this population, it seems worthy of a name of its own.

Range: As given by Phelps and Phelps, Jr. (1963, Bol. Soc. Venez. Cienc. Nat., 24: 379) for H. r. rubra in Venezuela: lower edge of the Subtropical Zone (450–1,200 metres) in the eastern coastal range, from Anzoátegui east to the Paria Peninsula of Sucre. Specimens were examined from Sucre only, but there is no reason to believe that the birds of immediately adjacent Anzoátegui and Monagas would differ.

As mentioned above, the Bolívar series represents the first record for this species from the area between the rivers Orinoco and Amazon. It is appropriate, therefore, to call these birds:

#### Habia rubica mesopotamia, subsp. nov.

Type: Carnegie Museum no. 33847, adult male, collected at the Rio Yuruán (a tributary of the Río Cuyuni), eastern Bolivar, Venezuela, 1st April, 1910, by M. A. Carriker, Jr. (collector's no. 6900).

Characters: Males paler below than rubra, with the abdominal area greyish; under tail-coverts more salmon-pink, less rose-pink; upperparts similar to rubra, but dark margins of red crown-patch less well marked or even absent. Bill paler, with upper mandible (both in dried skins and in freshly-taken birds, according to label annotations) brown rather than blackish. The two available females are closely similar to rubra, but are of a warmer, less greyish brown above.

Range: Known only from the type locality.

Remarks on Colombian populations: Meyer de Schauensee (1951, Caldasia, 5: 1053-1054) listed a single immature male from the upper Sinú Valley in Bolívar, Colombia, as the first record of Habia rubica west of the eastern Andes in Colombia. He was unable to identify it subspecifically. Carnegie Museum also has a single specimen from a previously unreported locality in Colombia: El Cauca, Magdalena (900 metres), on the west slope of the Eastern Andes. The subspecies coccinea is known only from the eastern slopes of this range. The specimen, an adult male in heavy moult, was collected 29th July, 1916, by Carriker. It is nearest coccinea in colour, but is distinctly brighter on the posterior underparts, this area being almost intermediate between coccinea and crissalis, but purer pinkish-red than either. It almost certainly represents an undescribed subspecies; this is not unexpected, as there is often a distinct subspecies on either slope of the Eastern Andes.

Blake (1962, Fieldiana: Zoology, 44: 110) has extended northward to the Sierra de Macarena, eastern Colombia, the range of H. r. rhodinolaema. Blake identified his four specimens as rhodinolaema partly by a process of elimination and partly on the basis of literature descriptions, not having topotypical material from eastern Ecuador available (Blake, in litt.) I have examined the two males from this series, and agree with Blake that they show no approach to coccinea, of which Carnegie Museum has the type series. Whether there is any intergradation between rhodinolaema and coccinea in eastern Colombia north of the Sierra de Macarena and south of Boyacá, or whether these two subspecies are isolated from one another, remains to be determined. In fact, it is obvious that much is yet to be learned about the distribution and characters of populations of Habia rubica in Colombia.

Specimens examined: Specimens of most of the subspecies of Habia rubica, from both Central and South America, are available at Carnegie Museum. I am indebted to Mrs. Albert Stickney of the Peabody Museum of Natural History, Yale University, and to Dr. Emmet R. Blake of the Field Museum of Natural History, for lending me critical supplementary specimens. The detailed comparisons were made with the following:

H. r. rubra: Trinidad (various localities), 9.

H. r. crissalis: Venezuela, Sucre: Mirasol, 2; El Yaque, 3; Yacua, 2; Pargo, 2.

H. r. mesopotamia: Venezuela, Bolívar: Río Yuruán, 8.

H. r. coccinea: Colombia, Boyacá: La Colorada, 5 (including type); Venezuela, Mérida: Azulita, 3.

H. r. rhodinolaema: Colombia, Meta: Sierra de Macarena, 2.

H. r. subsp: Colombia, Magdalena: El Cauca, 1.

# More weights of the Carmine Bee-eater

by P. L. Britton and R. J. Dowsett
Received 10th August, 1968

Dowsett weighed 105 breeding adult Carmine Bee-eaters Merops nubicus nubicoides Des Murs and Pucheran at two colonies near Mfuwe in the Luangwa Valley, Zambia (13°7′S., 31°45′E.) in October 1966. All birds were weighed at dawn, before they had fed. Their weights ranged from 44.5 to 65.0 gm., average 54.4 ∓ 4.1 gm. At colony A, 24 birds on 1st October averaged 56.5 gm.; at colony B, 55 birds on 9th October and 40 (including 14 recaptures) on 15th October averaged 53.6 and 53.8 gm. respectively. However, although there is virtually no difference in mean weight between the birds on 9th October and those on 15th October, birds recaptured on 15th October showed the following differences from 9th October: fourteen had decreased by 1.0-15.0 gm., average 4.5 gm.; two showed no change; and two had gained 1.5 and 2.0 gm. respectively.

If colony B mean weight is compared with the colony A mean weight, using a /-test, the difference between the means is statistically significant (P < 0.01), colony B birds being the lighter. As all birds can be considered members of a single Luangwa population, and all colony A birds were weighed before any colony B birds, this difference, together with recapture evidence, indicates a weight loss in adults during the first two weeks of October.

Britton (1967) has discussed weight variation in this species (under the name M. nubicoides) in detail, using data obtained at Beatrice, Rhodesia (18° 17' S., 30° 57' E.) Having allowed for the fact that Dowsett's birds were weighed at dawn, by reducing Beatrice means by 1.0 gm. (see fig. 1 in Britton, 1967), the September (dry season) Beatrice weights, which form the lightest series for that locality, average 60.1 gm. compared with 54.4 gm. for October (also dry season) Luangwa birds. Most young at both Luangwa colonies had hatched in the last few days of September, and it is generally recognised that, all other factors remaining constant, weights are very low during the period when young are being fed (Nice, 1938). This was not, however, the case at Beatrice where young in 1965 did not hatch until early November, after the rains had begun; the October Luangwa birds were feeding young in the dry season. Britton considered it likely that the rains